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EAST AFRICAN STANDARD

Umbrella fabrics — Specification — Part 1: Cotton fabrics

EAST AFRICAN COMMUNITY

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Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in East Africa. It is envisaged that through harmonized standardization, trade barriers which are encountered when goods and services are exchanged within the Community will be removed.

In order to achieve this objective, the Partner States in the Community through their National Bureaux of Standards, have established an East African Standards Committee.

The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the procedures of the Community.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

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Umbrella fabrics — Specification — Part 1: Cotton fabrics

1 Scope

This part of this East African standard specifies the requirements for woven umbrella fabrics composed of 100 % cotton fibres.

2 References

The titles of the East African Standards referred to in this East African Standard are listed in the back page.

3 Definitions

For the purpose of this East African Standard, the following definitions apply:

3.1 Piece

A woven umbrella fabric of full width, whose length is less than 10 metres.

3.2 Roll

A compact package of continuous length of at least ten (10) metres of an umbrella fabric wrapped or lapped on a suitable core and covered with suitable materials with the outer layer securely bound.

3.3 Water penetration resistance

The ability of a fabric to withstand penetration by water under specified conditions. The water may be under pressure (e.g. hydrostatic head test) or in the form of drops hitting the surface of the fabric.

3.4 Water repellency

The relative degree of the resistance of a fabric to surface wetting, water penetration, water absorption or any combination of these properties.

3.5 Water-repellent

A state characterized by non-spreading of a globule of water on a fabric.

NOTE The term is not normally applied to water-repellent finish impervious to air: this is generally referred to as waterproof.

3.6 Waterproof

The ability of a fabric to be fully resistant to penetration by water.

NOTE The term is an absolute term and implies that the water penetration resistance of the fabric is equivalent to its hydraulic bursting strength.

4 Requirements

4.1 Fabric composition

The fabric shall be woven from yarns of 100 % cotton fibres. This shall be determined in accordance with EAS 255.

4.2 Fabric properties

The fabric properties shall be as specified in Table 1. These properties shall be determined in accordance with the method of test indicated against each property in the table.

Table 1 — Fabric properties

| Characteristics | Requirement | Test Method | |
|--|-----------------------------|------------------------------------|--|
| Mass per sq.m, g, minimum | 140 | ISO 3801 | |
| Tear resistance, either direction, N minimum | 60 | EAS 254 | |
| Breaking force (5 cm \times 20 cm strips), either direction, N minimum | 600 | EAS 254 EAS 242 EAS 251 EAS 252 | |
| Dimensional changes after cold water immersion, max. | -3 % | | |
| Water penetration resistance, minimum | 40 cm H ₂ O | | |
| Water repellency | No wetting of outer surface | | |
| Colour fastness to weathering | 5 | EAS 243 | |
| Colour fastness to rubbing | 4 | EAS 239-1 | |

4.3 Dimensions of a piece

4.3.1 Width

The width of each piece shall be as declared subject to a tolerance of +2 % or -(minus) 1 %. This shall be determined in accordance with ISO 22198.

4.3.2 Length

The length of each piece shall be as declared subject to a tolerance of -(minus) 1%. This shall be determined in accordance with ISO 22198.

4.4 Dimensions of a roll

4.4.1 Width

The width of each role shall be as declared subject to a tolerance of -(minus) 1% or + 2%. This shall be determined in accordance with ISO 2286.

4.4.2 Length

The length of each role shall be as declared subject to a tolerance of -(minus) 1%. This shall be determined in accordance with ISO 2286.

5 Packing

The fabric shall be rolled-up into rolls or lapped into bales of the agreed length the rolls or bales shall be securely wrapped with suitable wrappers to prevent damage.

6 Marking

The following information shall be clearly marked on each roll or bale:

- a) manufacturer's name or registered trade mark;
- b) the words "100% cotton umbrella fabric";
- c) length in Metres (m);
- d) mass of roll or bale in Kg;
- e) width in centimetres (cm);
- f) country of origin

EAS 225-1:2001

References

- EAS 242, Method for determination of dimension change of fabrics by cold-water immersion
- EAS 254, Method for determination of tear resistance of woven fabrics by falling pendulum (Elmendorf) apparatus
- ISO 3801, Textiles Woven fabrics Determination of mass per unit length and mass per unit area
- EAS 255, Textiles Binary fibre mixtures Quantitative chemical analysis
- EAS 239-1, Method for determination of colour fastness of textile materials to rubbing Part 1: Dry and wet method
- EAS 243, Method for determination of colour fastness of textile materials to daylight
- EAS 251, Textile fabrics Determination of resistance of fabrics to water penetration Hydrostatic head test
- EAS 252, Textile fabrics Method for determination of water repellency of fabrics by cone test
- ISO 22198, Textiles Fabrics Determination of width and length
- ISO 2286-1, Rubber- or plastics-coated fabrics Determination of roll characteristics Part 1: Methods for determination of length, width and net mass
- ISO 2286-2, Rubber- or plastics-coated fabrics Determination of roll characteristics Part 2: Methods for determination of total mass per unit area, mass per unit area of coating and mass per unit area of substrate
- ISO 2286-3, Rubber- or plastics-coated fabrics Determination of roll characteristics Part 3: Method for determination of thickness